

CLAIMS

1. An engine water pump comprising:
 - a housing having an impeller assembly opening with a continuous axial inner retention surface;
 - a sheet metal plug having a generally radial closure portion
 - 5 bordered by a continuous axial flange, the flange press fitted into the inner retainer surface of the housing; and
 - a sealing adhesive between the axial flange and the inner retention surface.
2. An engine water pump as in claim 1 wherein the housing includes a radial outer surface surrounding the inner retention surface, the plug has a radial lip surrounding the axial flange, and the radial lip of the plug engages the radial outer surface of the housing for positioning the plug
- 5 in the opening.
3. An engine water pump as in claim 1 wherein the inner retention surface of the opening and the axial flange of the plug are generally cylindrical.
4. An engine water pump as in claim 1 wherein the adhesive is anaerobic.
5. A method of closing an impeller assembly opening in a housing of an engine water pump assembly, the method comprising the steps of:
 - forming the opening with a continuous axial inner retention
 - 5 surface;

providing a plug having a sheet metal body including a generally radial closure portion surrounded by a continuous axial flange adapted for press fitting into the inner retention surface;

10 applying a sealing adhesive to one of the axial flange of the plug and the inner retention surface of the opening;

pressing the plug into the opening with the axial flange of the plug press fitted in the inner retention surface of the opening to retain the plug in the opening; and

15 setting the adhesive to seal the assembly opening against fluid leakage and to increase the force of retention of the plug in the opening.

6. A method as in claim 5 wherein the plug includes a radial lip surrounding the axially extending flange, the housing includes a radial outer surface surrounding the inner retention surface, and the pressing step includes forcing the plug flange against the radial outer surface of the
5 housing to position the plug in the opening.

7. A method as in claim 5 wherein the sealing adhesive is anaerobic.